

**CUMBERLAND BAY SLUDGE BED  
WILCOX DOCK SITE  
FACT SHEET  
MARCH 29, 1997  
5-10-017**

**SITE BACKGROUND:**

The Cumberland Bay sludge bed is located in the Cumberland Bay of Lake Champlain within the city of Plattsburgh N.Y. The bed is composed of wood pulp, wood chip debris and other processing wastes from local wood processing industries. Records show that these discharges occurred for several decades and the wastes either settled or were directly discharged into this area of Cumberland Bay. Untreated waste disposal to the Bay ended in the early 1970's when the City of Plattsburgh's sewage treatment plant began treating wastes from local industries.

For years the sludge bed area was considered nothing more than a nuisance, emitting unpleasant odors, hampering boating and swimming activities and washing up wood debris along the shore. However, environmental sampling performed between 1992 and 1994 confirmed the presence of polychlorinated biphenyl (PCB) contamination in the sludge bed. Additional analyses confirmed the contamination of wood debris washing up on the public and private beaches of Cumberland Bay.

**ENVIRONMENTAL AND HUMAN HEALTH CONCERNS:**

There is currently a health advisory in effect for the consumption of several species of fish within Cumberland Bay due to elevated PCB levels. In addition, the commercial sale of yellow perch from Cumberland Bay is prohibited due to PCB concentrations exceeding the FDA marketplace standard.

The wood chip debris which washes up on the beaches of Cumberland Bay has PCB concentrations ranging from non-detect to over 200 ppm. Therefore, direct contact with the debris should be avoided. The sand of the beaches and bay bottom has been sampled and analytical results indicate PCB levels at either non-detect or very low concentrations. Direct contact with the sand of the beaches or the bay bottom is not considered an exposure route.

**CURRENT STATUS:**

The Cumberland Bay Sludge Bed Site was added to the Registry of Inactive Hazardous Waste Sites in November 1994. Work assignments to perform a beach cleaning IRM and a site characterization/feasibility study were issued in early 1995.

The beach cleaning IRMs have been conducted since May, 1995. Over 220 tons of contaminated material have been removed from the local beaches during the 1995 and 1996 seasons.

A new beach cleaning IRM is currently under development for the 1997 season. Work is expected to begin in early May.

The objectives of the site characterization study were to determine the extent of the sludge beds, the extent of contamination and the volume of contaminated materials. The objective of the feasibility study is to select the preferred remedial alternative for the site. The field work for the site characterization was conducted during the summer of 1995. Additional field work was conducted in 1996.

The Site Characterization Report and the draft Feasibility Study Report have been submitted by Rust Environment & Infrastructure. The following is a summary of the findings of those reports.

#### **SITE CHARACTERIZATION RESULTS:**

The sludge bed occupies an area of the bay that is approximately 34 acres in size. The average thickness of the bed is between one and two feet, however, the thickness of the bed by Wilcox Dock exceeds ten feet. The volume of the sludge bed is estimated at 93,000 cubic yards. Analytical results have shown that the sludge is contaminated with PCB's. This contamination has been detected throughout the bed (up to 1,850 ppm PCB localized). The lake bottom sediments beneath the sludge bed have not been impacted.

#### **DRAFT FEASIBILITY STUDY RESULTS:**

The Feasibility Study focused on the remedial alternatives that can be technically implemented and can achieve the project's remedial action objectives within a reasonable time frame. As such, technologies that could prove difficult to implement or might not be applicable or feasible based on site-specific conditions were eliminated from further consideration.

The draft remedial alternatives for the Cumberland Bay Sludge Bed Site which meet the criteria of the remedial action objectives include the following:

Removal of the sludge bed and the construction and operation of sludge dewatering and waste water treatment facilities on-site with either;  
Alternative 2 - Construction of an on-site containment facility or;  
Alternative 3 - Transportation and disposal at an off-site facility.

The no-action alternative is used as a baseline for comparison.

## **REMEDIAL ALTERNATIVES FOR THE CUMBERLAND BAY SLUDGE BED WILCOX DOCK SITE**

### **Alternative 1: no action**

This alternative would require continued beach cleaning @ \$150,000 to \$200,000/year, maintain the commercial fishing ban and the health advisory. The sludge bed would continue to erode and degrade the quality of Cumberland Bay.

### **Alternative 2: removal/on-site Confined Disposal Facility (CDF)**

This alternative would include the removal of the sludge bed, construction of dewatering and waste water treatment facilities and the construction, operation and maintenance of an on-site disposal facility.

The cost estimate for this alternative is \$12,381,895.

### **Alternative 3: removal/off-site landfill disposal**

This alternative would include the removal of the sludge bed, construction of dewatering and waste water treatment facilities and the off-site disposal of the waste bed.

The cost estimate for this alternative is \$17,815,955.

### **PROJECT SCHEDULE:**

The proposed project schedule includes:

Finalizing the Feasibility Study, completing the selection of the preferred remedial action with input from NYSDEC Region 5, City of Plattsburgh, NYS and Clinton Co. Department's of Health, Thruway Authority, other interested parties and the public.

Present the proposed remedial action at a public meeting and begin design and construction as soon as possible.

The remedial action is estimated to take approximately two years to complete.